

IN THE CLAIMS

1-6. (Cancelled)

Claim 7 has been amended as follows:

7. (Currently amended) A computed tomography device

5 comprising:

a radiation source which emits a radiation beam from a focus, at least said focus being displaceable relative to a system axis to scan an examination subject with said radiation beam from a plurality of projection angles;

10 a radiation detector on which said radiation beam is incident after passing through said examination subject, said radiation detector being formed by a plurality of detector elements in rows proceeding substantially perpendicularly to said system axis and columns proceeding substantially parallel to said system axis, each of said detector elements generating an electrical signal corresponding to radiation from said radiation beam incident thereon;

15 a plurality of electronic elements for reading out said electrical signals from said detector elements, to generate measured values;

20 the detector elements in a first region of said columns of said radiation detector, including at least one entire column, being connected to a larger number of said electronic elements than the detector elements in a second region of said columns of said radiation detector comprising a same number of said columns; and

25 a computer supplied with said measured values for reconstructing an image of said examination subject therefrom.

8. (Original) A computed tomography device as claimed in claim 7 wherein the detector elements in at least one of said columns are not connected to any of said electronic elements.

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9. (Original) A computed tomography device as claimed in claim 7 wherein said computer generates additional measured values from said second region by interpolation of the measured values from the electronic elements connected to the detector elements in said second region.

5 10. (Original) A computed tomography device as claimed in claim 7 wherein said computer generates additional measured values from said second region by extrapolation from the measured values from the electronic elements connected to the detector elements in said first region.

10 11. (Original) A computed tomography device as claimed in claim 7 further comprising a support arrangement adapted to receive said examination subject thereon and a displacement arrangement for producing relative displacement between said radiation beam and said support mechanism along said system axis, with said projections being obtained at successive positions along said system axis.

15 12. (Original) A computed tomography device as claimed in claim 7 wherein said detector elements are detector elements which generate said electrical signals by producing electrical charges due to absorption of said radiation.

20 13. (Original) A computed tomography device as claimed in claim 7 wherein the detector elements in one of said rows have a first length in a direction along said system axis and wherein the detector elements in another of said rows have a second length in said direction along said system axis, said first and second lengths being different.